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EXAMINER

MILLER, BRANDON J

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,629

Applicant(s)

SUUMAKI ET AL.

Examiner

Brandon J Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/28/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayers in view of Mazur.

Regarding claim 1 Sayers teaches negotiating parameters during connection handover of a mobile station between radio network subsystems (see col. 23, lines 53-55 and col. 24, lines 1-6). Sayers teaches signaling from a source radio network subsystem to a core network or to a target radio network subsystem to a source radio network subsystem that a handover is required and signaling from the core network or from the target radio network subsystem to the source radio network subsystem that the handover is to proceed (see col. 23, lines 6-15, 20-30). Sayers teaches transmitting parameters from a source radio network subsystem to a target radio network subsystem directly or via a core network without any need for renegotiating parameters over an air interface between the mobile station and target radio network subsystem (see col. 23, lines 53-55 and col. 24, lines 1-10). Mazur does not specifically teach parameters of an optimization algorithm during a connection handover. Mazur teaches parameters of an optimization algorithm (see abstract, col. 2, lines 64-67, and col. 3, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include

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parameters of an optimization algorithm during a connection handover because this would allow for flexibly providing a wide variety of mobile communications services and efficiently allocating resources to support those services.

Regarding claim 3 Sayers teaches a core network connected a radio network for communicating with a mobile station over an air interface wherein a first one of a radio network subsystems includes a source radio network controller for signaling to a core network or to a target radio network controller in a second one of a radio network subsystems that a handover is required wherein in response thereto a core network or target radio network subsystem signals a source radio network controller that handover is to proceed (see col. 23, lines 6-30). Sayers teaches parameters are then transmitted from a source radio network controller to a target radio network controller directly or via a core network without any need for renegotiating parameters over an air interface between a mobile station and a target radio network controller subsystem (see col. 23, lines 53-55 and col. 24, lines 1-10). Sayers does not teach plural interconnected radio network subsystems for communicating with a mobile station. Mazur teaches plural interconnected radio network subsystems for communicating with a mobile station over an air interface (see col. 4, lines 39-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include plural interconnected radio network subsystems for communicating with a mobile station because this would allow for flexibly providing a wide variety of mobile communications services and efficiently allocating resources to support those services.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayers in view of Mazur and Bark.

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Regarding claim 2 Sayers and Mazur teaches a device as recited in claim 1 except for during initial establishment of a connection between a mobile station and a source radio network subsystem, the parameters may include various optional sets of parameters, only one of which is accepted by the source radio network subsystem, including storing all of the optional sets of parameters and transmitting all of the optional sets of parameters. Bark teaches during establishment of a connection between a mobile station and a source radio network subsystem, parameters including various optional sets of parameters (see col. 6, lines 25-30 & 57-59 and col. 7, lines 57-58). Bark teaches a parameter that is accepted by a source radio network subsystem (see col. 6, lines 60-67 and col. 7, lines 6-8). Baker teaches storing optional sets of parameters wherein a step of transmitting a parameter includes transmitting all optional sets of parameters (see col. 7, lines 39-42 & 57-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include during initial establishment of a connection between a mobile station and a source radio network subsystem, the parameters may include various optional sets of parameters, only one of which is accepted by the source radio network subsystem, including storing all of the optional sets of parameters and transmitting all of the optional sets of parameters because this would allow for improved measurement for radio network control and optimization operations.

Regarding claim 4 Sayers and Mazur teaches a device as recited in claim 1 except for during an initial negotiation of parameters between a mobile station and a source radio network controller, parameters include various optional sets of parameters, only one of which is accepted by a source radio network controller, wherein various optional sets of parameters are stored by a source radio network controller for transmittal to a target radio network controller after source

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radio network controller signals a target radio network controller that handover is to proceed.

Sayers does teach negotiating parameters during connection handover of a mobile station between radio network subsystems (see col. 23, lines 53-55 and col. 24, lines 1-6). Sayers does teach signaling from a source radio network subsystem to a target radio network subsystem that the handover is to proceed (see col. 23, lines 6-15, 20-30). Bark teaches during establishment of a connection between a mobile station and a source radio network subsystem, parameters including various optional sets of parameters (see col. 6, lines 25-30 & 57-59 and col. 7, lines 57-58). Bark teaches a parameter that is accepted by a source radio network subsystem (see col. 6, lines 60-67 and col. 7, lines 6-8). Baker teaches storing optional sets of parameters and transmitting those parameters (see col. 7, lines 39-42 & 57-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include during an initial negotiation of parameters between a mobile station and a source radio network controller, parameters include various optional sets of parameters, only one of which is accepted by a source radio network controller, wherein various optional sets of parameters are stored by a source radio network controller for transmittal to a target radio network controller after source radio network controller signals a target radio network controller that handover is to proceed because this would allow for improved measurement for radio network control and optimization operations.

Response to Arguments

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wiesen U.S. Patent No. 6,317,598 discloses a device and method for administering and assigning radio transmission channels in mobile radio networks.

Wallentin U.S. Patent No. 6,292,667 discloses multicell area paging for cellular telecommunications system.

Manning U.S. Patent No. 6,580,699 discloses a method for updating an R-P connection for a roaming mobile station.

Kransmo U.S. Patent No. 6,594,242 discloses broadcasting of two generation cellular system control channel information over a three generation control channel to support roaming and handover to two generation cellular networks.

Braun U.S. Patent No. 6,501,953 discloses data transmission between a first mobile services switching center of a first mobile radio system and a second mobile services switching center of a second mobile radio system.

Boudreaux U.S. Patent No. 6,466,556 discloses a method of accomplishing handover of packet data flows in a wireless telecommunications system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 7, 2004


WILLIAM TROST
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